

Listing of Claims:

1. An information processing apparatus having a mouse cursor display function, comprising:
 - a display unit for displaying data on a bit mapped display screen;
 - a pointing device for designating a coordinate location on said display screen, and for directing scrolling and setting a scrolling speed for data displayed on said display screen;
 - mouse cursor control means for displaying a mouse cursor at a coordinate location on said display screen designated by said pointing device;
 - scroll control means for scrolling the data on said display screen in accordance with a display data scrolling instruction from said pointing device; and
 - scrolling speed display means for displaying a number of speed indicators during scrolling, the number of displayed speed indicators corresponding to a relative scrolling speed set by said pointing device while scrolling data on said display screen, and arranging the speed indicators in a scrolling direction relative to a center of said mouse cursor.
2. An information processing apparatus according to claim 1, further comprising means for changing a displayed image of the mouse cursor in response to whether a specific button of said pointing device is clicked or released.
3. In a computing environment, an enhanced mouse cursor for indicating a direction and a relative speed of scrolling of data displayed in a window on a display screen of an information processing apparatus that designates a coordinate location using a pointing device, said enhanced mouse cursor comprising:
 - a mouse cursor body located at the coordinate location designated by using said pointing device; and
 - one or more speed indicators displayed in a number corresponding to a scrolling speed while scrolling data on said display screen, wherein said mouse cursor body does

not move during scrolling, and the number of speed indicators displayed corresponds to a speed at which a user is moving the pointing device.

4. An enhanced mouse cursor according to claim 3, wherein the speed indicators are displayed relative to said mouse cursor body in a direction in which scrolling is occurring.

5. An enhanced mouse cursor according to claim 3, wherein said one or more speed indicators are arranged relative to a center of said mouse cursor in a scrolling direction.

6. (Amended) An enhanced mouse cursor according to claim 3, wherein [of] said enhanced mouse cursor is displayed only during a data scrolling position.

7. A control method for an information processing apparatus having a mouse cursor display function, said apparatus including a display unit for displaying data on a bit mapped display screen, and a pointing device for designating a coordinate location on said display screen and for directing scrolling and setting a scrolling speed of data displayed on said display screen, said control method comprising of:

(a) displaying a mouse cursor at a coordinate location on said display screen designated by said pointing device;

(b) scrolling data on said display screen in accordance with a display data scrolling instruction from said pointing device; and

(c) displaying speed indicators in a number corresponding to a scrolling speed set by said pointing device while scrolling data on said display screen, and displaying the speed indicators in a scrolling direction relative to a center of said mouse cursor.

8. (Amended) A computer readable storage medium comprising computer
[Computer] readable code stored on said computer readable storage medium and
executable by a computer system, which [that] includes a display unit for displaying data
on a bit mapped display screen and pointing device for designating a coordinate location
on said display screen and for directing scrolling and setting a scrolling speed for data
displayed on said display screen, [said code] to perform a control method, said control
method comprising:

[(a) a routine for] displaying a mouse cursor at a coordinate location on said
display screen designated by said pointing devices;

[(b) a routine for]scrolling data on said display screen in accordance with a
display data scrolling instruction from said pointing device; and

[(c) a routine for] modifying the mouse cursor to include speed indicators in a
number which corresponds to a relative scrolling speed set by said pointing device while
scrolling data on said display screen and displaying the speed indicators in a scrolling
direction relative to a center of said cursor.

9. An apparatus, comprising:
an information processing system having a display, a keyboard, a lever input
device embedded in the keyboard, and three buttons; and
a graphical user interface cooperating with said information processing system (a)
to display a cursor at a coordinate position on the display designated by a manipulation of
the lever input device and (b) to control system functions, wherein the lever input device,
three buttons, and said graphical user interface cooperate (c) to activate a software
program associated with a selected displayed icon when a first of the three buttons is
depressed, (d) to display software program characteristics when a second of the three
buttons is depressed, and (e) to scroll within a displayed window when a third of the three
buttons is depressed and the lever input device is manipulated,
wherein the cursor indicates a direction and a relative speed of scrolling within the
display window, and wherein the relative speed of scrolling is indicated by displaying a
number of speed indicators that corresponds to a pressure at which a user is pressing the

lever input device.

10. The apparatus according to claim 9, wherein said information processing system is a notebook computer system.

11. The apparatus according to claim 9, wherein the third button is disposed between the first and second buttons.

12. The apparatus according to claim 9, wherein a scroll message is originated upon depression of the third button.

13. An information processing apparatus, comprising:
a notebook computer system having a display, a keyboard, a lever input device
embedded in the keyboard, and three buttons, the three buttons being a left button, a right
button, and a middle button; and

a graphical user interface cooperating with said notebook computer system (a) to
display a cursor at a coordinate position on the display designated by a manipulation of
the lever input device and (b) to control system functions, wherein the lever input device,
three buttons, and said graphical user interface cooperate (c) to activate a software
program associated with a selected displayed icon when the left button is depressed, (d) to
display software program characteristics when the right button is depressed, and (e) to
scroll within a displayed window when the middle button is depressed and the lever input
device is manipulated.

wherein the cursor indicates a direction and a relative speed of scrolling within the
display window, and wherein the relative speed of scrolling is indicated by displaying a
number of speed indicators that corresponds to a pressure at which a user is pressing the
lever input device.

14. An information processing apparatus, comprising:
a notebook computer system having a display, a keyboard, a pointing device, a left

button, a right button, and a middle button; and
a graphical user interface cooperating with said notebook computer system (a) to
display a cursor at a coordinate position on the display designated by a manipulation of
the pointing device, and (b) to control system functions, wherein the pointing device,
three buttons, and said graphical user interface cooperate (c) to activate a software
program associated with a selected displayed icon when the left button is depressed, (d) to
display software program characteristics when the right button is depressed, and (e) to
scroll within a displayed window by manipulation of the pointing device when the middle
button is depressed, wherein the cursor indicates a direction and a relative speed of
scrolling within the display window, and wherein the relative speed of scrolling is
indicated by displaying a number of speed indicators that corresponds to a speed at which
a user is moving the pointing device.

Cancel claim 15.

Cancel claim 16.